



10071818.030602

Rec'd PCT/PTO 16 APR 2002

SEQUENCE LISTING

<110> Ozeki, Yoshihiro
Takashi, Fukuda
Oyanagi, Mikiko
Koda, Takatoshi

<120> Novel Miniature Inverted-Repeat
Transposable Elements (Mites)-Like Element and
Transcriptional Activation Element

<130> SAEG100.001APC

<140> 10/031,818

<141> 2002-01-17

<150> PCT/JP00/04837

<151> 2000-07-19

<150> JP2000/175825

<151> 2000-06-12

<150> JP11/206320

<151> 1999-07-21

<150> JP11/206316

<151> 1999-07-21

<160> 14

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 769

<212> DNA

<213> Carrot (*Daucus carota* L. cv. Kurodagosun)

<400> 1
gggatctctttt taaaaataacc catctgtataa attatttttt taaaaataact accatctttt 60
tcattgtttt taaaaataacc ttttcataaa tttttttttt caaaaataacg atttgcaact 120
tttgcaacct catttgcaac cttgggcggc gcagccgtaa aagttgccag tgaggttgca 180
aaagttgcaa atgagtttgt aaaaagttgca aatgaggttg caaaagttgc aaataaaaaa 240
ggaaagttgc aacagttgca actgcaattg caactagttc aactgaaaaa tgtaagttgc 300
aaaagttgca aatgaggttg caactaaatg caactgaaaa ctgtaagtaa caacagatgt 360
atggtgtgccc cctggcgggg ccggttagatt acaatagaat caactgaatg caatcatatg 420
caactgaata caactatatg caatcatata tgcaattaca aatcctgatt tcaagttcca 480
gttttcgaat gtcattttcg aaatcgatat atatatatat atatatatat cgatttcgaa 540
aatgacattc gaaaaactgga acttgaaatc aggaattcag ctgcatatga agttgcaaaa 600
gaggttgcaa cacggctggc gccgcctgta gttgcaaat aggttgcaaa agttgcaaac 660
agattttttt aaaaaaagat tttatgaaaa ggtattttta aaaaaaatc tgggaaggtg 720
tatttttgaa aacaataaaa gaaaaggtag gtagttttgt agatttccc 769

<210> 2

<211> 299

<212> DNA

<213> Carrot (*Daucus carota* L. cv. Kurodagosun)

<400> 2

ctccctacgt cccattttat gtgacctcat tttctttttg ggacgtctca aaaaaataa 60
 cctagaatac ttactatttt ttaacactat ttttcactat tacaccacc aactctatat 120
 tttatactat tttattatta aataaacact attacaccca ctactttttt ccactatctc 180
 aaactctata ttaaatattg ataggtcac cactttacc ctctttacc taacattact 240
 acattttctt taatctcgt gaaagtcaaa ctcttcaca taaaatggga cagagggag 299

<210> 3

<211> 1192

<212> DNA

<213> Carrot (*Daucus carota* L. cv. Kurodagosun)

<400> 3

ggtaccgggc cccccctcga ggtcactccc tacgtcccat tttatgtgac ctcatttttc 60
 ttttgggacg tctcaaaaaa aataacctag aatacttact attttttaac actatttttc 120
 actattacac ccaccaactc tatattttat actattttat tattaataa acactattac 180
 acccaactct tttctccact atctcaaatc tattattaaa tattgatagg tccaccactt 240
 taccactttt tcaactacat ttactacatt tttcttaac tccgtgaaag tcaaacctcat 300
 tcaataaaaa tgggacagag ggagtaatta ttaattttta tagacggat cgataagcct 360
 atcgatacgc tctcagattc gcaaacataa aaagaaaagg gatcttttta aaaataacca 420
 tctgtaaaat tattttttta aaaatactac catctttttc attgttttta aaaatacctt 480
 ttcataaaat ttttttttca aaaatacgat ttgcaacttt tgcaacctca tttgcaacct 540
 tggggcgggc agccgtaaaa gttgccagtg aggttgcaaa agttgcaaat gagtttgtaa 600
 aagttgcaaa tgaggttgca aaagttgcaa ataaaaatgg aaagttgcaa cagttgcaac 660
 tgcaattgca actagtcca ctgaaaactg taagttgcaa aagttgcaa tgaggttgca 720
 actaaatgca actgaaaact gtaagtaaca acagatgtat ggtgtgcccc tggcggggcc 780
 gttagattac aatagaatca actgaatgca atcatatgca actgaatca actatatgca 840
 atcatatatg caattacaaa tctcgatttc aagttccagt tttcgaatg cattttcgaa 900
 atcgatatat atatatatat atatatatcg atttcgaaaa tgacatttca aaactggaac 960
 ttgaaatcag gaattcagct gcatatgaag ttgcaaaaaga ggttgcaaca cggtcggcgc 1020
 cgcctgtagt tgcaaatgag gttgcaaaag ttgcaaacag tatttttgaa aaaaagattt 1080
 tatgaaaagg tattttttaa aataattctg gaaggtagta tttttgaaaa caataaaaga 1140
 aaaggttaggt agttttgtag atttccaga cctcgagggg gggcccggtta cc 1192

<210> 4

<211> 8

<212> DNA

<213> Carrot (*Daucus carota* L. cv. Kurodagosun)

<400> 4

ggtgcaaa 8

<210> 5

<211> 8

<212> DNA

<213> Carrot (*Daucus carota* L. cv. Kurodagosun)

<400> 5

ggtgcaac 8

<210> 6

<211> 8

<212> DNA
 <213> Carrot (Daucus carota L. cv. Kurodagosun)

<400> 6
 tttgcaaa 8

<210> 7
 <211> 8
 <212> DNA
 <213> Carrot (Daucus carota L. cv. Kurodagosun)

<400> 7
 tttgcaac 8

<210> 8
 <211> 7
 <212> DNA
 <213> Carrot (Daucus carota L. cv. Kurodagosun)

<400> 8
 tatgcaa 7

<210> 9
 <211> 7
 <212> DNA
 <213> Carrot (Daucus carota L. cv. Kurodagosun)

<400> 9
 aatgcaa 7

<210> 10
 <211> 158
 <212> DNA
 <213> Carrot (Daucus carota L. cv. Kurodagosun)

<400> 10
 gggatctttt taaaaatacc catctgtaaa attatttttt taaaaatact accatctttt 60
 tcattgtttt taaaaatacc ttttcataaa tttttttttt caaaaatacy atttgcaact 120
 tttgcaacct catttgcaac cttgggcggc gcagccgt 158

<210> 11
 <211> 158
 <212> DNA
 <213> Carrot (Daucus carota L. cv. Kurodagosun)

<400> 11
 acggctggcg ccgcctgtag ttgcaaatga ggttgcaaaa gttgcaaaac gtatttttga 60
 aaaaaagatt ttatgaaaag gtatttttaa aaataattct ggaaggtagt attttgaaa 120
 acaataaaa aaaggttagg tagtttttga gatttccc 158

<210> 12
 <211> 32
 <212> DNA
 <213> Carrot (Daucus carota L. cv. Kurodagosun)

<400> 12
ctccctacgt cccattttat gtgacctcat tt

32

<210> 13
<211> 32
<212> DNA
<213> Carrot (*Daucus carota* L. cv. Kurodagosun)

<400> 13
aaactcatc acataaaaatg ggacagaggg ag

32

<210> 14
<211> 1553
<212> DNA
<213> Carrot (*Daucus carota* L. cv. Kurodagosun)

<400> 14
ggtaaccgggc cccccctcga ggtcactccc tacgtcccat tttatgtgac ctcattttct 60
ttttggggacg tctcaaaaaa aataacctag aataacttact attttttaac actatttttc 120
actattacac ccaccaactc tataattttat actattttat tattaataaa acactattac 180
accactact tttctccact atctcaaatc tattattaaa tattgatagg tccaccactt 240
taccactttt tcaactacat tttcttaatc tccgtgaaag tcaaaactcat 300
tcacataaaa tgggacagag ggagtaatta ttaattttaa taaattatat gtgattttga 360
ttatgtgtgg attcttgata aaatatcaca gagttgatat aaattctaaa gatttaacca 420
caatgtttca aaatctcata gatatttagta ggattcaaaa aattttaaat acggtcaaaa 480
atctcataaa attcatcatt ttattaaatc caaaaaaatc cagtaaatat tgacaatcag 540
attttaatga attttaaatt gaacaatctc agtggaatc catgagattt taaaataaa 600
ttttaaattc taattgaata ccaccagatt ttgtaaaata attttaaatt ttaattgaaat 660
attcaagatt ttaatatatt ttaataatc tcgatctgaa ttacaaaaaa tgccttaaaat 720
ctgaatccca tacgtctctc cagattcgca aacataaaaa gaaaagggat ctttttaaaa 780
atacccatct gtaaaattat ttttttaaaa atactaccat ctttttcatt gtttttaaaa 840
ataccttttc ataaaatttt tttttcaaaa atacgatttg caacttttgc aacctcat 900
gcaaccttgg cgccgcgcgc cgtaaaaagt gccagtggag ttgcaaaagt tgcaaatgag 960
tttgtaaaag ttgcaaatga ggttgcaaaa gttgcaaaa aaaaatggaaa gttgcaacag 1020
ttgcaactgc aattgcaact agttcaactg aaaactgtaa gttgcaaaa ttgcaaatga 1080
ggttgcaact aaatgcaact gaaaactgta agtaacaaca gatgtatgg gtgcccttgg 1140
cgggcgctgt agattacaat agaatacaat gaatgcaatc atagtcaact gaatacaact 1200
atatgcaatc atatatgcaa ttacaaatcc tgatttcaag ttccagtttc cgaattctcat 1260
tttcgaaatc gatatatata tatatatata tatatcgatt tcgaaaaatga catcggaaaa 1320
ctggaacttg aaatcaggaa ttcagctgca tatgaagtgg caaaagaggt tgcaaacacgg 1380
ctggcgccgc ctgtagttgc aaatgaggtt gcaaaagtgg caaacagtat ttttgaaaaa 1440
aagattttat gaaaagggtat ttttaaaaat aattctggaa ggtagtat 1500
taaaagaaaa ggtaggtagt tttgtagatt tccagacgg tatcgataag ctt 1553